

A Systematic Study on the Marine Sponges from
the South Sea of Korea
— Three new record for Korea —

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한국 남해 해산해면류의 계통분류학적 연구
— 한국3미기록종 —

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적 요

한국산 해산해면동물의 분류학적 연구의 일환으로 한국해양연구소의 1987년
부터 1988년까지 남해안일대에서 채집된 60표본을 동정한 결과 *Spirastrella*
*insignis*과 *Spirastrella abata* 그리고 *Caminus awashimensis* 3종이 한국미기록
종으로 밝혀져 이것들을 간단히 기재한다.

Key words: systematics, marine sponges. South sea, Korea.

INTRODUCTION

More than 170 species of Marine Sponges were already reported from South Sea of Korea (Sim, 1981, 1982, 1985). The present paper is based on the collection of the Korea Ocean Research and Development Institute (KORDI). All of the materials were collected from the South Sea of Korea during the period from 1987 to 1988. 60 specimens were examined.

As a result, *Spirastrella insignis* Thiele, 1898; *Spirastrella abata* Tanita, 1961 and *Caminus awashimensis* Tanita, 1969 are turned out to new to the Korean fauna. The remarks and figures on these species are

given this paper. The authors would like to acknowledge Mr. Jae, Jong Geel of Korea Ocean Research and Development Institute for his giving the present specimen them.

SYSTEMATIC ACCOUNT

Class Demospongia Sollas, 1885

Subclass Tetractinomorpha Levi, 1956

Order Hadromerina Topsent, 1984

Family Spirastrellidae Ridley & Dendy, 1886

Genus *Spirastrella* Schmidt, 1868

1. *Spirastrella insignis* Thiele, 1898

(Pl. 1, Figs. 1-2)

Spirastrella insignis Thiele, 1898 (p.43, pl.2, fig. 5, pl.3, fig. 18).

Spirastrella insignis: Tanita, 1961 (pp.349-350, pl. 4, fig. 17. text-fig. 9); 1964 (p. 18); 1965 (p. 50, pl. 2, fig. 9); 1967 (p. 117, pl. 2, fig. 8); 1969 (p.75-76).

Material examined: Kwantaldo, VII. 1988.

Remarks: The sponge is massive, 10cm × 8cm × 2cm in dimensions. The surface has many mammiform papillae. The colour in spirit is grey and the texture is hard but rather sponge. Thiele's specimen differs from our specimen in spiculations has rare subtylostyle.

Spicules: Style 220-460 × 5-10μm

Spiraster 33-53 × 4-8μm

Distribution: Korea, Japan.

2. *Spirastrella abata* Tanita, 1961

(Pl. 1, Figs. 3-4)

Spirastrella abata Tanita, 1961 (pp.348-349, pl. 4, fig. 16. text-fig. 8).

Spirastrella abata: Tanita, 1967 (p. 117, pl. 2, fig. 9); 1969 (p. 75).

Material examined: Bijindo, 15M depth, VII/1987.

Remarks: This sponge is massive, hemi-spherical in shape. The entire surface is covered with numerous papillae. Oscule is invisible and pore is situated the underlying subdermal cavities. The colour of the surface is violet (in life), but the inner part of the sponge is brown in alcohol. Texture is slightly firm, size up to 7cm × 11cm × 2.5cm. The species is similar to *Spirastrella panis* Thiele, 1898 in external appearance, but this specimen has tylostyle and spiraster is smaller than Thiele's specimen.

Spicules: Tylostyle 292-412 × 9-13μm

Spiraster 20-35μm

Distribution: Korea, Japan.

3. *Caminus awashimensis* Tanita, 1969

(Pl. 2, Figs. 1-2)

Caminus awashimensis Tanita, 1969 (pp. 77-78, pl. 2, fig. 9-11, text-fig. 2).

Material examined: Sorido, 20M depth, VII/1988.

Remarks: This sponge is fragment, size up to 4cm × 3cm × 1cm. Surface is smooth. The color in alcohol is pale brown with a purplish tint and the texture is stony owing to the thick cortex of sterrasters. The cortex is about 0.2cm thick. Spherules are abundant. This species has rare oxeas than in Tanita's specimen.

Spiocules: Oxea	500-539 × 7-10μm
Strongyle	450-639 × 9-13μm
Orthotriane	rabdomes 530-620 × 15-20μm
	clad 350-465 × 13-17μm
Sterraster	80-106μm
Oxyaster	20-23μm
Spherules	2-4μm
Distribution: Korea, Japan. .	

ABSTRACT

Sponges were collected from 3 different localities of the South Sea of Korea, during the period 1987 to 1988. 60 species were examined. As a results, it was found that *Spirastrella insignis*, *S. abata* and *Caminus awashimensis* were new to Korean fauna.

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Plate 1

Figs. 1-2. *Spirastrella insignis*.Figs. 3-4. *Spirastrella abata*.

1, entire animal; 2A, style, B, spiraster.

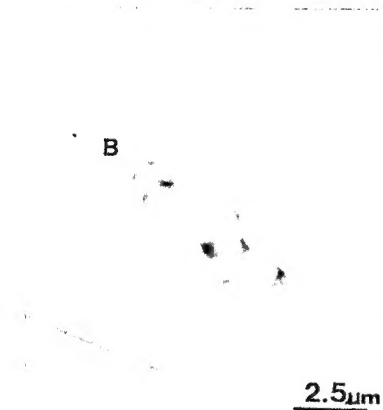
3, entire animal; 4 A, tylostyle, B, spiraster.

PLATE 1



2

A

25μm

B

2.5μm

3

4

A

B

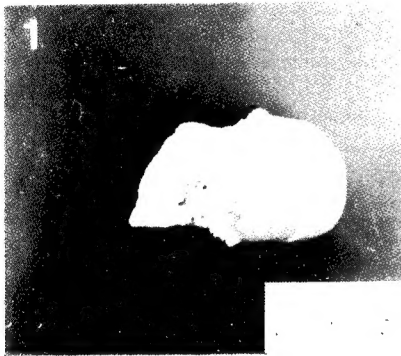
25μm25μm

Plate 2

Figs. 1-2. *Caminus awashimensis*.

1, entire animal; 2 A, strongyle, B, oxea, C, orthotriane, D, sterraster, E, oxyaster, F, spherules.

PLATE 2



2

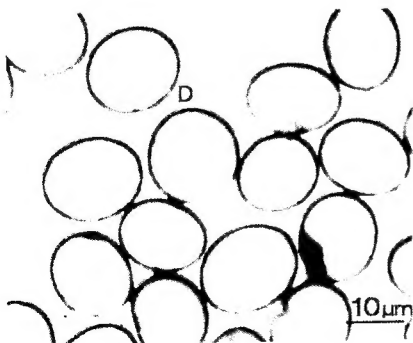


B

C

100 μm

50 μm



E

10 μm

F

2.5 μm